

## ABSTRACT OF THE DISCLOSURE

A data transmission apparatus 10 for transmitting a data signal in accordance with a predetermined protocol in one direction within a ring network of a plurality of data transmission apparatuses includes: signal determination means 11 for determining a presence or absence of a data signal from an immediately upstream data transmission apparatus 10 in the ring network based on an amplitude of the data signal; and stopping means for stopping transmission of the data signal to an immediately downstream data transmission apparatus 10 if the signal determination means 11 determines that there is no incoming data signal. The data signal is a signal obtained by modulating an amplitude component of an electrical signal of a predetermined frequency. Thus, a data transmission apparatus is provided which can quickly detect a momentary power interruption in a data transmission system composed of data transmission apparatuses interconnected in a ring fashion.